

Chromet® 9

TOP FEATURES

- B8 alloyed steel: 9% chromium, 1% molybdenum martensitic alloy steel for elevated temperature service up to 600°C
- Designed for high strength and improved corrosion resistance in superheated steam, hot hydrogen gas and high sulphur crude oils where higher performance than 5% chromium, 0.5% molybdenum steels is required
- Moisture resistant coating provides low amounts of weld metal hydrogen levels for a superior weld
- Weld metal chemistry is low in impurity elements allowing it to respect the X Factor (<15ppm) and J-factor (<120ppm)

TYPICAL APPLICATIONS

- Oil Refineries
- Power Plants
- Pressure vessels
- Heat Exchangers
- Steam Piping

CLASSIFICATION

AWS A5.5	E8015-B8 H4
EN ISO 3580-A	E CrMo9 B 4 2 H5
EN ISO 3580-B	E 6216-9C1M

CURRENT TYPE

DC+/AC

WELDING POSITIONS

All position, except vertical down

CHEMICAL COMPOSITION (WEIGHT %), WELD METAL

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu
Min.	0.05	0.50	not specified	not specified	not specified	8.0	not specified	0.90	not specified
Max.	0.10	1.00	0.60	0.025	0.025	10.0	0.40	1.20	0.3
Typical	0.06	0.75	0.35	0.012	0.015	9.0	0.2	1.0	<0.05

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Properties after PWHT*	Min.	Typical	
		740°C/2h	746°C/3h
Tensile strength (MPa)	590	710	680
0.2% Proof strength (MPa)	530	600	550
Elongation (%)	4d	19	26
	5d	18	25
Reduction of area (%)	not specified	70	70
Impact ISO-V (J)	+20°C	34	130
	0°C	not specified	-
	-10°C	not specified	90
Hardness (HV)	not specified	235	220

*PWHT : AWS is 740 +/- 15°C /1, ISO 3580-A is PWHT is 740-780°C/2h. See front page under PWHT for normal fabrication practice.

OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.5 x 350	70-110
3.2 x 350	80-140
4.0 x 450	100-180

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 350	CAN	179	4.0	CHROMET9-25-1
3.2 x 350	CAN	125	4.3	CHROMET9-32-1

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing.
Please refer to www.lincolnelectric.eu for any updated information.